Technical Bulletin #62:

Compost

Compost is the result of natural materials (brown and green) breaking down. This process **copies and accelerates the decomposition that occurs in natural environments**, which provides nutrients in the soil for plants to use.

Compost is a great, easy, and low-cost or free source of organic fertilizer.

Making Compost
Compost requires a balance of green and brown materials, water, air, and a little bit of top soil.

Green Material*/ Wet	Brown Material/Dry
Green Leaves	Straw
Food scraps	Twigs
Feathers	Sawdust
Rotted fruit/veg	Paper
Coffee grounds	Husks (rice, maize, groundnuts)
Manure	Nutshells

*The smaller the pieces of materials, the faster the compost pile will decompose.

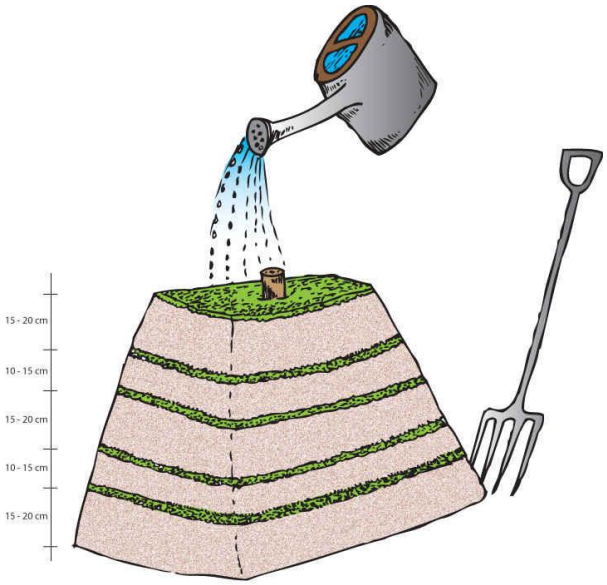
Healthy Topsoil from the Area
Including topsoil will introduce micro-organisms into the compost, helping the decomposition process.

Compost should look alive, with lots of insects, worms, and other organisms. This helps the soil to become healthy when compost is added.

Pile Compost
Begin by placing a 15-20cm layer of brown material into a square of roughly $1m^2$.
Add a 10-15cm layer of green material.
Scatter a handful of topsoil across the top of this layer.

Layers should be moist, but not too wet. Add water as required, especially in the dry season.

Repeat the layers (brown, green, soil, water) until the entire pile reaches 1-1.5 meters in height.



Place a thick layer of brown material on top and on the sides of the pile to trap heat and protect it from rain. A tarp or sheet of plastic can be used if available.

When the green and brown materials react together, they decompose, creating heat. The inside of the pile should become very hot. Temperature should be monitored to ensure the process is working correctly. This can be done by placing a long stick in the middle of the pile, and placing your hand against it when it's removed from the pile to feel for warmth.

The pile will become smaller and cool down after 1-3 weeks. This means it is time to 'turn' the pile, or mix it. The pile will then heat up again. When it cools, it should be turned again. Repeat until it becomes finished compost. Using smaller pieces and turning the pile as soon as it cools down will speed up the process. On average compost will take four to six weeks to make.

Finished compost looks and smells a lot like soil. There will be a few pieces of plant material in the finished product (that is okay), but most of the original material will have broken down.

Trouble Shooting

If no heat is felt within two to five days, either the balance of brown to green material is wrong, or there is not enough moisture present. The pile should be restarted.

Creating good compost requires the correct ratio of 'brown' to green' materials. If you notice more of one type present, more of the other needs to be added.

A compost pile should not smell. A strong odor is the result of too much green material. More brown material should be added.

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